CLAIMS

1. A device for radio signal distribution comprising at least two signal input/outputs (S1 to S4, E/S3, E/S4) to be connected to decoders (2), characterized in that it comprises at least one means of communication (150), linking the input/outputs between them, in a communication frequency band.

2. The device as claimed in claim 1, characterized in that the communication means (150) is a bandpass filter whose bandwidth corresponds to the communication frequency band.

3. The device as claimed in either of claims 1 and 2, characterized in that it also comprises at least two second signal input/outputs (E/S1, E/S2) to be connected to two independent reception devices (201, 202), each second input/output (E/S1, E/S2) being connected to one first input/output (E/S3, E/S4) via a filter (301, 302) that rejects the communication frequency band.

4. The device as claimed in either of claims 1 and 2, characterized in that it also comprises:

- at least two second signal input/outputs (E1, E2) to be connected to two independent reception devices (201, 202),
- switching means (110) allowing each of the first input/outputs (E1, E2) to be connected to each of the second input/outputs (S1 to S4) depending on a selection signal, said selection means (110) being equipped with means (114) for suppressing the communication frequency band.

5. The device as claimed in either of claims 1 and 2, characterized in that the device is a unit (100) for converting radio waves into an electrical signal that also comprises:

- at least two transposition means (125 to 134) for transforming a transmission frequency band into at least two intermediate frequency bands,
- at least two selection means (112, 113, 115) allowing each of the first input/outputs (S1, S2, S3, S4) to be connected to each of the transposition means.

6. A device as claimed in claim 5, characterized in that the transmission frequency band is separated into at least two intermediate frequency bands corresponding to two different wave polarizations.

7. A device as claimed in either of claims 5 and 6, characterized in that the transmission frequency band is separated into at least two intermediate frequency bands corresponding to the same wave polarization but whose bandwidth is substantially twice as narrow.

8. A device as claimed in any of claims 5 to 7, characterized in that it comprises four input/outputs (S1, S2, S3, S4) and at least three communication means (150).

9. A satellite program reception system comprising:

- at least two electrical signal sources corresponding to radio waves, said sources having at least two input/outputs (S1, S2, S3, S4),
- at least two decoders (2) each connected to one of the input/outputs (S1, S2, S3, S4) of said unit (100) by means of two distinct coaxial cables,

characterized in that the two decoders (2) exchange data between them via the coaxial cables,

and in that the system comprises at least one device as claimed in either of claims 3 and 4 whose

first input/outputs are connected to the decoders and whose second input/outputs are connected to the sources.

10. A satellite program reception system comprising:

- at least one unit (100) for converting radio waves into an electrical signal, said unit having at least two input/outputs (S1, S2, S3, S4),
- at least two decoders (2) each connected to one of the input/outputs (S1, S2, S3, S4) of said unit (100) by means of two distinct coaxial cables,

characterized in that the two decoders (2) exchange data between them via the coaxial cables,

and in that said unit (100) is a device as claimed in any of claims 5 to 8.